

# Finding a Contemporary Building Tradition for Tropical Mega-Cities : The case of Manila

History of Urban Settlements in the Philippines and causes behind  
Urban Form of Manila

Finding an Architectural Tradition for the Future



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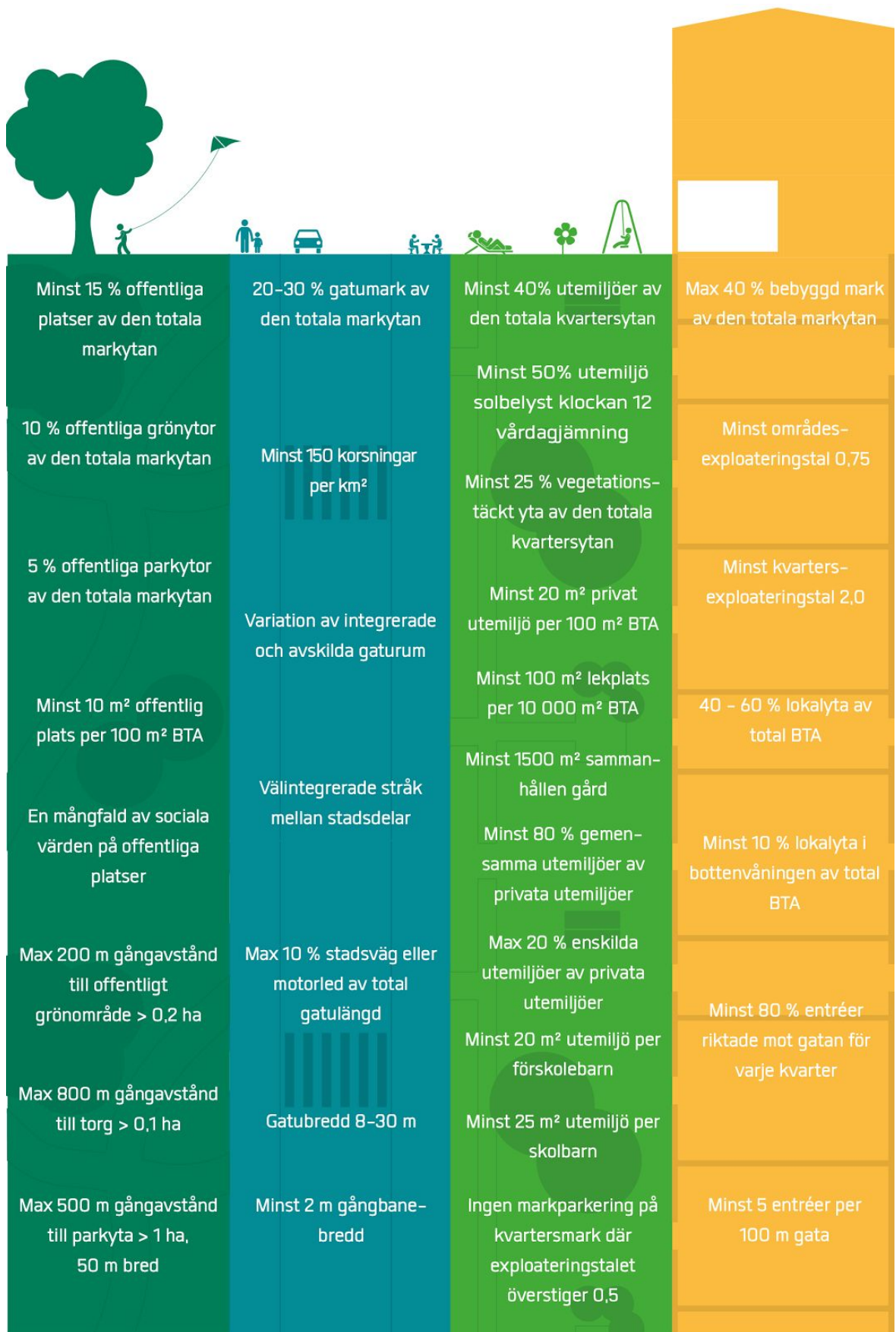
## Introduction

Manila has grown in an extraordinary pace since the 1970s. The Philippines is a booming economy with a huge and rapidly growing population cramped on 7000 islands, and the capital, located on the largest island Luzon, has come to outgrow and overshadow all other urban areas in the country. Mega Manila, or south-east Luzon, is now home to 35 million people, or  $\frac{1}{3}$  of the country's population. It has become a typical example of a so called primate city (Rosenberg).

Even though efforts are being made to strengthen urban regions outside south east Luzon (and the gap is actually closing) Manila continues to grow rapidly and there is no sign that it's a passing phenomena.

Housing is of course lagging behind, but more importantly the form of the city and its infrastructure no longer fit its purpose. However, what is missing in the mega-city of Manila is not more roads or skyscrapers, but a smaller scale. The master-planning made by Chicago architect Daniel Burnham is designed for a much smaller city and the periphery of his plan - now the center of Metro Manila - is poorly detailed and has a scale that is not suitable for urban life. This has led to poor land use, extensive auto-mobile use and large areas of land being occupied by informal settlers.

During this essay I will explore the causes behind the urban form of Manila and the urban form of informal settlements in Manila. I will explore different types of densities, and different types of measuring urbanity. Most importantly I will argue for a decentralised city building process as necessary in creating a more urban but still sustainable environment.



Recommendations made by research studio Spacespace, Sweden for city building in nordic countries

## Explanations

When I talk about *Manila* in this essay I will refer to the urban area of Greater Manila.

I will use the term *urban form* throughout this essay to describe the structure of the city as a whole. The city will be understood as a landscape formed continuously by individuals acting on the environment. The different actors will be known as *agents*. An agent is anyone with the power to change an environment and the incentive to do so.

I will use the term *city building* which is to be understood as the Swedish term “*stadsbyggande*” which implies not city planning nor urban design, but simply the process of building a city.

I will use the term *meme* and *memetics* throughout this essay. This is a way of looking at the development of ideas and culture as an evolutionary process where the spread of ideas (memes) is compared to the spread of genes. *Memetics* is in the same way a parallel to genetics. Once in this essay I use the word “*teme*” which means looking at technology the same way.

## Background

### **History of urban settlements in the Philippines and causes behind the contemporary form of Manila**

Researching the history of the Philippines, one finds that there is a common tendency to focus on its history starting from the Spanish Colonialism period in 16th century, with little to be said about pre-colonial times. But Filipino History and influence on the development of its settlements didn't start with the Spanish. It began way before, around 30,000 years ago, when migrants from the Indonesian archipelago and elsewhere sought shelter and settlement on the 7,000 islands.

Tracing back the history of the Philippines, I describe the various political structures that evolved with time. I focus on the development of urban form as a result of control, whether foreign or indigenous.

The earliest historically mentioned settlement in the Philippines is the Kingdom of Tondo, a fortified kingdom whose capital was located in the Manila Bay. The basic unit of settlement at the beginning was the barangay - Malay word meaning boat that was used to denote a communal settlement. (Anon, n.d) The hierarchy within the political structure was simple then. Kinships groups were led by chiefs within the barangay that consisted of different social divisions: nobles, freemen and landless agricultural workers and slaves.

With the establishment of trade ties with the Chinese Ming Dynasty, Tondo gained more regional prominence and the settlements grew larger with the influx of more Indo-Malay Migrants and Chinese traders. Due this this trade as well, Islam was introduced to the Philippines through traders from Indonesian Islands. (Anon, n.d) Tondo was annexed by the Sultanate in Brunei in 1500 and a process of islamification through forced conversion started.

The spanish arrived in Tondo in 1570 and defeated the local rulers in the Manila Bay area.

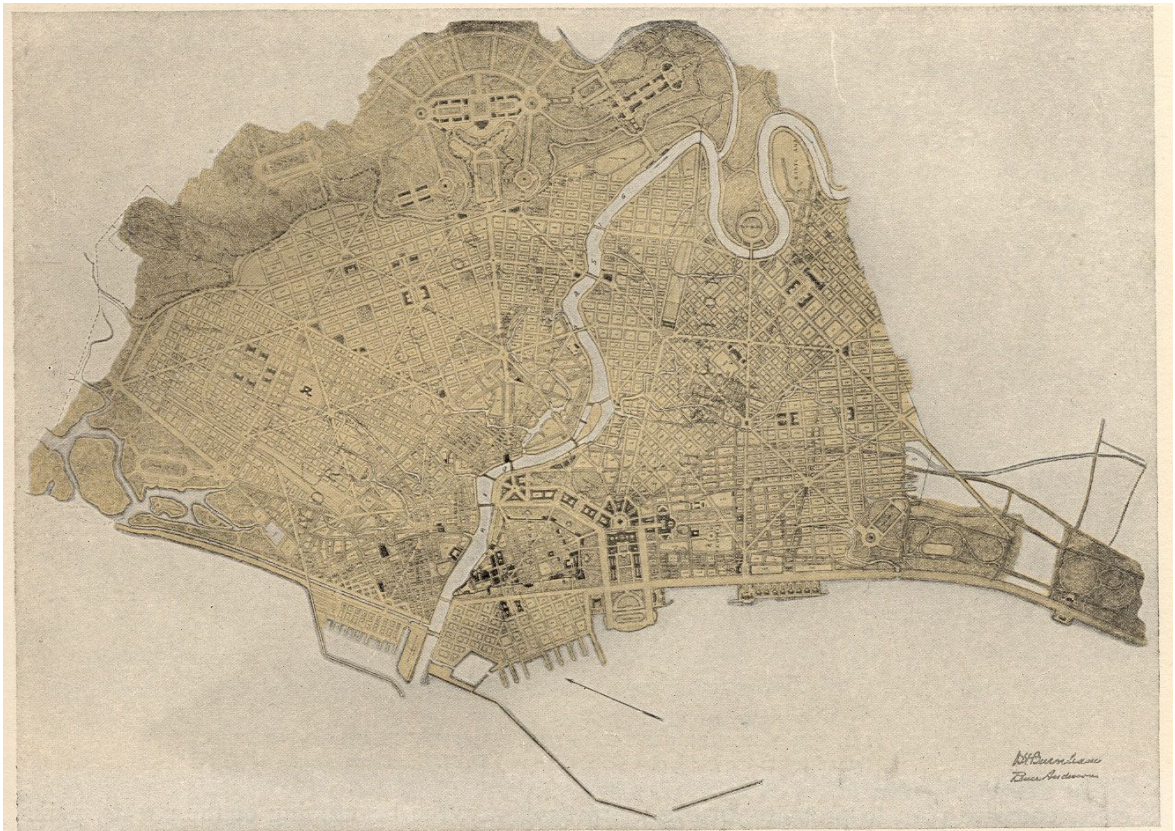


Tondo came under the control of Manila (a Spanish Fort), ending the existence of tondo as an independent state. In the Spanish colonial period, the church and the state were inseparable in achieving Spanish objectives. Their aim was to gain converts to christianity and this goal was realized. In this period, the the civil administration was built upon the traditional village organization and it used the traditional local leaders to rule for Spain indirectly. From this new cultural system however, the Muslims and Upland tribal peoples remained detached and alienated. (Anon, n.d)



Manila in 1898, showing the legacy of the Spanish rule.

U.S rule in the Philippines began in 1898, where Washington defined its colonial mission as one of tutelage as way for achieving Filipino independence eventually. Therefore, Urban planning in this period served the needs of secular education and public services.(Anon, n.d) The Burnham plans of Manila and Quezon City from this era still dominate the urban form of Manila.



The Burnham plan of Manila.

After the Second World War reconstruction schemes followed the same rationality and were influenced and inspired by the West. The lack of resources led to uncontrolled rural migration to Manila. That coupled with a high birth rate led to the rapid increase of the population of the city, beyond the government's capacity to provide housing. This led the urban poor to start building homes in what is now referred to as shanty towns or informal settlements. (Philippines, n.d)

At the same time, Monumental architecture was used by the government to achieve centralized political impact. The rule of Marcoses was a setting for massive construction that was never witnessed before in the country. (Philippines, n.d)

Various political and control structures in the Philippines have led to the evolution of Manila from the barangay to a contemporary mega-city with a rigid urban fabric. Most importantly it's the utopian Burnham plan that shape the contemporary urban form. Also, the difficulties to realise and control the plan, has led to patchwise informal settlements being an important part of Manila's urban form.



## **Colonialism, religion, centralisation and the level of control**

The Philippines has due to its location, geography and size been a victim to what can be considered as colonialism several times, e.g. Chinese and Indo-Malay influences and Buddhism and more or less forced processes of islamization.

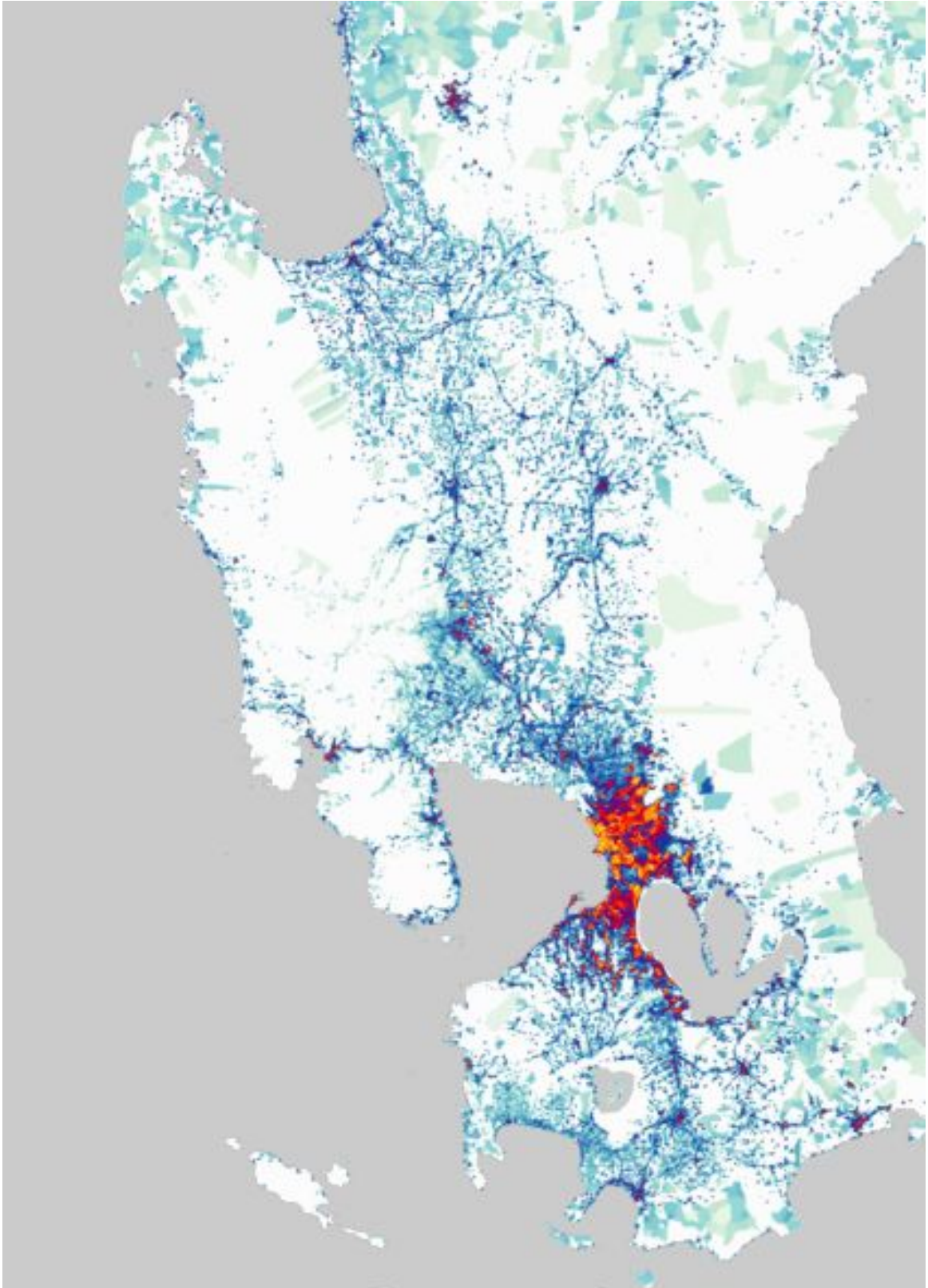
Religion, was systematically used also by the Spanish in a thought out way during their process of colonisation. In this context religion will be understood as a primitive - pre gutenberg - legal system, and a tool for coercion and consolidating power over a state structure; where the promise of eternal life and fear of death is the strongest coercive force.

Religion was used as a tool of control in lack of more sophisticated alternatives. It is dependent on genes (individuals), driven by their genetic imperatives (fear, conformity etc), to spread its memes (culture). Modern legal systems are instead dependent on memes (technology), for example laws and text, and do not need the coercive force of eternal life contra suffering.

The power of religion as a coercive force is limited and so was the power of the Spanish colonialists. While the american colonial rule had better mechanisms for coercion and control, the strongest coercive force in the history of the Philippines is that of the independent government.

The technology used today for control are much more sophisticated and can reach much further into people's lives and minds. And even though independency has been reached, the centralisation of power has never been stronger in the Philippines. The central government in Manila represents a population of more than a 100 million people on 7000 islands speaking more than a 100 languages.

The very essence of the Philippines is for me its heterogeneity and its cultural creole. This is not visible in the urban structure of the island group, with Manila and the tagalog language being totally dominant. It is not visible in the urban form of Manila, which instead is dominated by the clear discrepancy between the homogeneity of its formal environments and the chaos of its informal environments.



The urban form of South East Luzon show regional settlement patterns far outside Metro Manila

## Analysis: The Arbitrary Nature of Urban Form

### **The Nation State Capital, an Arbitrary Mega City?**

The growth of large cities is often considered inevitable. Large cities are seen as “engines of growth” and the agglomeration effects caused by density is seen as their greatest strength in the modern “knowledge based” economy. There is almost an unanimous stance to encourage the growth of cities amongst IGOs and NGOs.

However, it is hard to prove that size matters above all, and many of the most “global” cities are medium sized cities (e.g. Singapore). Also, urban structure varies from country to country and region to region.

Manila, Jakarta and Bangkok are all nation state capitals in countries with huge populations. They are all so called “primate cities” whereas their primacy as an urban region overshadows that of other urban areas both in population and economic, political and cultural importance.

It is possible to question the legitimacy of nation state capitals and therefore the one can discuss vulnerability of a primate city acting as one. And it is not the pull of rich cultural life that attracts people to these cities but rather national limitations in trade, governance and state structures.

Although we can question the causes behind the growth of Manila and the utility of having such a dominant city. And even though other urban areas in the philippines (e.g. Cebu, Davao) has a higher growth in percentage, Manila has the absolute highest in absolute numbers and there is no sign that Manila will not continue to grow intensively in the near future.

## **Compromise as the main characteristic of urban life**

Compromise is always necessary in an urban context. One can therefore always criticize the urban environment, resulting in an enticement about finding “utopian” solutions to urban problems. Acknowledging this fact is important in city building, as not doing so can lead to tunnel vision and arbitrary decision making.

This is not done by SKAT (*swiss center for appropriate technology*) in their book about building in tropical climates which leads to their recommendations being contradictory to urban form as we know it.

*“Urban forms and external space (for warm humid climates)*

*An open settlement pattern is the appropriate response to the climate.*

*To provide sufficient air circulation, buildings should be scattered and have a low population density.*

*Buildings should be separated with large, free spaces between them. This allows airflow which provides ventilation for cooling and a hygienic environment.*

*The height of the buildings should, in general, not exceed 3-storys. Higher buildings receive too much radiant heat and give wind obstruction to neighbouring buildings.”*

These recommendations are possibly good for a programmed layout in a tropical suburban neighborhood, but definitely not for central Manila. The focus of their recommendations are on mitigating negative side effects of urban form instead of creating positive synergy effects.

## **Exponential growth and the blindfold of our identities**

Decisions about city building are made by agents that are human beings. Human beings are shaped throughout their lives and we base our value made decisions on experience and on the core values that make up our identity.

Today we live in a world of exponential technological growth and our world tends to change faster than we do as individuals. This has led to revolutionary movements aiming



to liberate us from the “weight of our past” (e.g. modernism, futurism). However, the legacy of these movements has often been a hard paradigm shift, instead resulting in further rigidifying the prejudices of the current era.

I argue that revolutionary methods applied to city building harm rather than helps to create a good environment. First of all I argue this because I believe that research about cities is as developed as medical science was before the discovery of germ theory in the mid 19th century. And just like taking professional medical advice then could lower your life expectancy, city building decisions based on contemporary research can result in a less sustainable environment. Second of all, I argue this because doctors would give general recommendations but never prescribe general medication to the entire population, whilst city building regulations and plans aims to do exactly that towards even the smallest entity of the city, the buildings.

The role of professionals in city building should be that of enabling as many actors as possible to take part in the city building process. Providing public space to encourage urban densification is a way of doing this. The aim should be to create an as decentralised city building process as possible.

I argue this because all agents make value based, and therefore arbitrary decisions. Therefore the “wisdom of the crowds” make the sum of these decisions less arbitrary. I also believe that decentralised city building creates a culture, a building tradition, which is resilient towards paradigms and revolutionary ideas. It also allows for a freer flow of ideas and for more beauty to be created. It results in higher potential, but not necessarily better outcome. However, i believe that this potential is essential whereas we know so little, and the way we as individuals are blindfolded by our identities, make it impossible for only one person to understand the future needs of the city.

### **Informal settlements as a contemporary building tradition**

Informal settlements are freed from many of the constraints found in the formal sector. At the same time they are faced by many other challenges, such as a lack of resources, insecure tenure and being thwarted by authorities. The environment is therefore perceived

as unsustainable and chaotic.

I would argue that this is not the case, but that informal settlements are more or less optimal given their preconditions. The built environment in informal settlements is the result of strategies of survival and a manifestation of human endeavor. In the end, I believe that only the treadmill of poverty is responsible for these strategies resulting in negative consequences. Therefore I believe it is of utmost importance the built informal environment is fully acknowledged by those in power. In my mind, it is the clear distinction and discrepancy between the formal and informal environment that is the biggest obstacle in creating a truly good environment for the both of them.

The typologies and architectural phenomena found in informal settlements are worth studying, and the city building of informal settlements should be viewed as something as unusual as a contemporary building tradition freed from the constraints of the centralised, industrialised, nation state society we all live in.



Tondo, the neighborhood has grown more or less informally and has the highest population density in Manila.



## Discussion: Density, Proximity, Scale and Resilience

### **Measuring density**

Density is a key issue when analysing cities. Population density is the most obvious and common way to measure density. The problem with this measurement is that it says very little about the urban fabric. A mainly one storey informal settlement in Manila can have a much higher population density than the city center of a European city. However, the floor area ratio can be much higher in the latter, as well as the daytime population. The missing figure here is floor area per person.

Central Stockholm has a density of 10000 people/km<sup>2</sup>, while the city of Manila (the densest in Metro Manila) has 46000 people/km<sup>2</sup>. But in Stockholm the average citizen has 40 m<sup>2</sup> per person in living space, while the same figure in Manila is 12, e.g. 3.3333 times more space. So if the floor area per person in Manila increased to that of Stockholm there would only be 13800 persons/km<sup>2</sup>, a density equivalent to that of Kungsholmen in Stockholm. Therefore the floor area ratio of Kungsholmen is approximately the same as that of Manila.



Tondo, incredibly high population density, very much built space but mostly low rise buildings.

## **Density and proximity**



View over Tondo taken with a tilt shift lens. The romantic picture does not show the urban problems found on the ground.

There is no doubt a need for high density in future cities. Even if green energy would become abundant and transportation infinitely much cheaper and safer, the sheer size of the transportation apparatus in a low-density city is in conflict with the most important aspect of the city, proximity.

Proximity is both the greatest economic and cultural quality of the city. Whilst density is a “hard” measurement, proximity is more soft. Proximity can of course be measured quantitatively, but chiefly it is something you experience.

The subjective experience of proximity is affected by barriers such as highways and large blocks. The objective experience is affected by the interconnectedness in the streetscape. For example, there is a great different in what you can reach within 500 m if you count birds distance or walking distance. The more intricate the street network is, the more space you can reach, i.e. spatial density. With increased spatial density comes, not only a richness in spaces, but a possible richness in built environments.



Both densities, hard and soft, are needed for a rich urban life, But one is necessary for human well being, and that is the density of spaces and environments. This density can be found in a garden as well as in a city. It's the reason why a suburban villa street can feel more alive than a dense, large scale neighbourhood.

I will call this soft density urban diversity. It is comparable to biodiversity, whilst population density is comparable to measuring biomass. Biodiversity is the product of genetic diversity, just as cultural diversity is the product of memetic diversity. This memetic diversity is the strength of cities in the knowledge based economy and it should be manifested in the urban form by as many agents as possible to be able to reproduce and create a high urban diversity.

I would say urban diversity is lacking in Manila, and even though it is densely populated it does not feel rich or intense. Master planned environments that has had a “suburban” scale when it comes to spatial density are now found in the center of the city leading to a sense of vastness and placelessness.

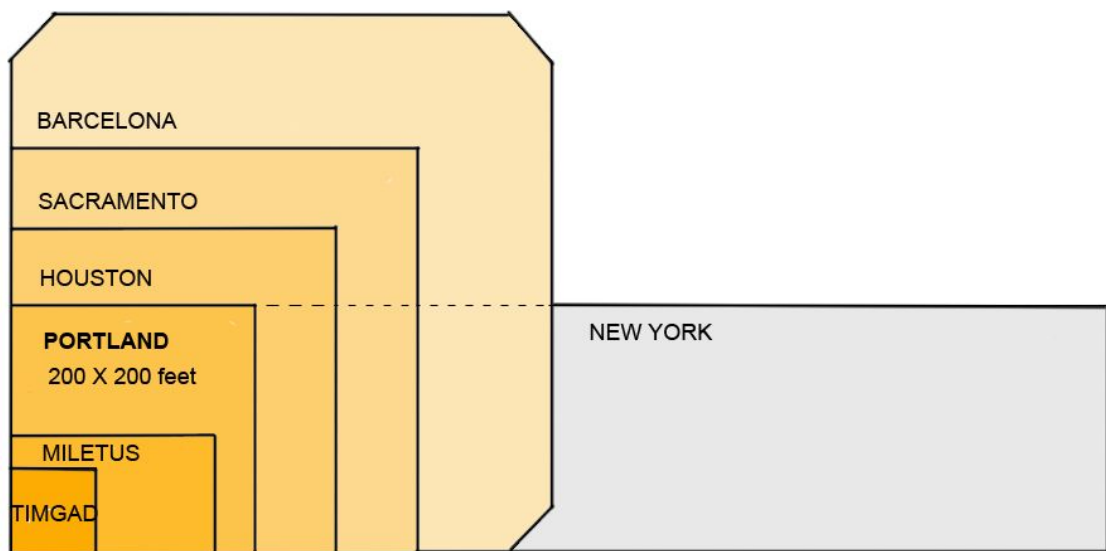


Makati, in clear contrast to its surroundings suggest that this is not the result of natural laws.

### Proximity, scale, resilience and plasticity

The city of Portland is famous for its dense grid network. You can fit four portland blocks into one block in Barcelona's L'eixample. It is said to be the densest grid in the USA and the main reason behind Portland's urban success. However, it does not meet the recommendations made by Spacescape showed on page 3 having 140 crossings per km<sup>2</sup> instead of 150.

From this we can either conclude that master planning leads to a non human scale or that the results of Spacescape's research has led to unreasonable high standards in their recommendations.



Block sizes in different cities with the portland block being 200x200 feet, 60x60 m.

Density is often an argument for building tall buildings. Tall buildings can of course achieve a high population density. However, it is hard to achieve a high spatial density and urban diversity, since the buildings need a large footprint to function economically. Tall buildings are also generally surrounded by more space, making it even harder to create spatial density. Finally the height itself can cancel out positive effects in proximity given the time it takes to travel to to your apartment. It can be compared to living on a dead end

street where you have to walk a certain distance to reach the rest of the urban fabric.

To achieve high urban diversity I believe you need high spatial density. You also need high population density but it is not as crucial. There is also a possibility that too high population density can have negative impacts on social life and therefore urban diversity and that there is such a thing as a “goldilocks density”.

Scale is crucial in achieving the hard measurement of spatial density. But scale is also crucial in achieving high urban diversity. Here it is the scale upon which different agents exercise control. Plot sizes and the scale of the buildings are critical in creating a high urban diversity. This has not been researched enough upon, but it was stated by both *Gehl* and *Jacobs*. As I see it, a certain scale becomes impersonal. At a certain point you stop growing plants and furnishing the public space immediately outside your front door. Agents do not longer interact with their environment and urban diversity is lost.

Finally I believe that a smaller scale creates a more plastic and resilient environment as the structures are easily adapted to new demands and there are more agents endorsing new ideas.

I believe that there are massive technological revolutions to be made in the near future and that there will be a DIY (do it yourself) revolution. With this I believe a DIY-green revolution will follow. The cost of improving a small scale informal settlement will then be much lower than improving a rigid large scale housing area.

## Conclusion: A Building Tradition for the Future

The role of Architects in finding a new building tradition should be that of enabling, consulting and acting. Enabling when it comes to city building, consulting when it comes to building design, and acting upon the environment in everyday life just as everyone else.

In city building, enabling strategies can be providing public space to encourage growth. This is extra important in “horizontal developments” such as informal settlements. Here it also important to minimize the side effects of providing this open space and it should be done in close cooperation with the inhabitants. Another enabling strategy can be planning infrastructure. When doing this, it’s important to be aware of the huge importance infrastructure for future development and the risk of encouraging horizontal development by providing non efficient traffic infrastructure. Finally and most importantly one should promote a proactive city building that enables as many agents as possible by simplifying and enabling small scale development while strictly regulating large scale developments as it can have negative effects on the urban form. This can be done by providing land to individuals.

The consulting part of building design is the traditional work of the architect. It should be done upon request from developers and preferably not on speculation. It should not be confused with detailed planning of neighborhoods or regulating small scale development. Research is a great example of consulting work as long as it doesn’t result in arbitrary regulations. I truly believe that buildings should be built and designed by users and that people are intelligent enough to do so. I do not mean built as in brick by brick but as the user being the constructor.

The acting part of being an architect is the easiest. It is just about living your life and being as true to yourself and the environment as possible, and not confusing the role of our profession with that of a teenage boy playing minecraft. The built environment is just like nature a sensitive thing and should not be needlessly meddled with. It takes time for beauty to evolve and our distaste for chaos and the shortcomings of present urban environments



should not tempt us to destroy it.

I truly believe that beauty, is not designed, but instead evolves. Therefore I believe that our built environment should be created and maintained by as many agents as possible. When reaching a certain scale, this is no longer possible. The city building process is then left in the hands of professionals. A certain quality is then lost, and in the end also the common, once ubiquitous, knowledge of how to build a cohere, ordinary environment without any formal understanding.

And whilst Habraken believes that this process is irreversible, therefore requiring us architects to gain more knowledge about urban form, I believe that it's only a parenthesis in the city building process of the modern city. I believe that the chaos of industrialism is soon to be over and that the landscape of our planet will start to consolidate into its sustainable post-industrial form. Therefore, I believe that focusing of quantitative aspects in city building is contra productive not only in the industrialized world - but in the entire world. To find this sustainable form I believe we must enable as many agents as possible to act upon the environment. And this enablement will not be the work of architects. It will be a result of redistribution of power and resources from a small minority to the greater majority following the disruptive enlightenment of the ongoing information revolution.

The large scale programmed structures of the 20th century will then be standing as lonely monuments in this new urban landscape reminding us of a time of mediocrity and housing our emotionless tools and machines.

My dream is that I as an architect will design only one ordinary environment - and that is the one of my own house.

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